

Title (en)

SYRINGE FOR MULTI-COMPONENT MATERIALS, METHOD OF ACTIVATING A SYRINGE, MIXING AND DISPENSING APPARATUS AND MULTI-COMPONENT CARTRIDGE

Title (de)

SPRITZE FÜR MEHRKOMPONENTENMATERIALIEN, VERFAHREN ZUR AKTIVIERUNG EINER SPRITZE, MISCH- UND AUSGABEVORRICHTUNG UND MEHRKOMPONENTENKARTUSCHE

Title (fr)

SERINGUE POUR MATÉRIAUX À COMPOSANTS MULTIPLES, PROCÉDÉ D'ACTIVATION DE SERINGUE, APPAREIL DE MÉLANGE ET DE DISTRIBUTION ET CARTOUCHE À COMPOSANTS MULTIPLES

Publication

**EP 3160380 A1 20170503 (EN)**

Application

**EP 15730160 A 20150619**

Priority

- EP 14173481 A 20140623
- EP 2015063833 W 20150619

Abstract (en)

[origin: EP2959861A1] The invention relates to a syringe (10), preferably a single-fill syringe, for multi-component materials, comprising a mixer housing (12), a mixing element (14), a multi-component cartridge (18) and a mixing head (16), the mixing head (16) being arranged at least partly within the mixer housing (12) and adjacent to the multi-component cartridge (18), wherein the mixing head (16) is arranged moveable in an axial direction of the syringe (10) between at least two positions, the at least two positions comprising a sealed position and a dispensing position, wherein the axial movement of the mixing head (16) is brought about by a rotation of at least a part of the mixer housing (12; 12b) relative to the multi-component cartridge (18).

IPC 8 full level

**A61C 5/60** (2017.01); **A61C 5/64** (2017.01); **A61C 9/00** (2006.01); **B05C 11/10** (2006.01); **B05C 17/005** (2006.01)

CPC (source: CN EP KR US)

**A61C 5/64** (2017.01 - EP KR US); **A61C 9/0026** (2013.01 - EP KR US); **B01F 25/105** (2022.01 - CN US); **B01F 25/30** (2022.01 - CN); **B01F 25/42** (2022.01 - CN); **B01F 25/4316** (2022.01 - CN EP KR US); **B01F 33/50112** (2022.01 - US); **B01F 35/522** (2022.01 - US); **B01F 35/7164** (2022.01 - CN); **B01F 35/7174** (2022.01 - CN); **B05C 11/1031** (2013.01 - EP KR US); **B05C 17/00553** (2013.01 - EP KR US); **B05C 17/00593** (2013.01 - EP KR US); **B01F 2035/351** (2022.01 - CN); **B01F 2101/19** (2022.01 - US); **B01F 2101/36** (2022.01 - US)

Citation (search report)

See references of WO 2015197492A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 2959861 A1 20151230**; CA 2952316 A1 20151230; CN 106457173 A 20170222; CN 106457173 B 20200110; EP 3160380 A1 20170503; EP 3160380 B1 20230809; JP 2017526401 A 20170914; JP 6748581 B2 20200902; KR 20170028366 A 20170313; US 10335249 B2 20190702; US 2017156820 A1 20170608; WO 2015197492 A1 20151230

DOCDB simple family (application)

**EP 14173481 A 20140623**; CA 2952316 A 20150619; CN 201580033898 A 20150619; EP 15730160 A 20150619; EP 2015063833 W 20150619; JP 2016575203 A 20150619; KR 20177001968 A 20150619; US 201515321423 A 20150619